FACT SHEET FOR NPDES PERMIT WA-003190-9 HANSEN BOAT COMPANY

This fact sheet is a companion document to the draft National Pollutant Discharge Elimination System (NDPES) Permit No. WA-003190-9. The Department of Ecology (the Department) is proposing to reissue this permit, which will allow discharge of drydock flood water and stormwater to waters of the state of Washington.

This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the waste water, and the regulatory and technical basis for those decisions. Public involvement information is contained in Appendix A. Definitions are included in Appendix B.

GENERAL INFORMATION				
Applicant:	Hansen Boat Company			
Facility and Address:	4124 – 34 th Avenue NE Everett, WA 98205			
Type of Facility:	Ship Construction and Repair			
Discharge Location:	Steamboat Slough, Class AA fresh water tributary to Snohomish River Latitude: 48° 20' 02" N Longitude: 122° 11' 00" W			
Waterbody ID Number:	WA-07-1005			
SIC Code:	3731			

TABLE OF CONTENTS

INTRODUCTION	3
BACKGROUND INFORMATION	5
DESCRIPTION OF THE FACILITY	
History	
Industrial Process	
Wastewater Management	
Sandblasting Process	
Best Management Practices	
PERMIT STATUS	
SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT	
WASTEWATER CHARACTERIZATION	
PROPOSED PERMIT LIMITATIONS	
TECHNOLOGY-BASED EFFLUENT LIMITATIONS	
SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS	9
Numerical Criteria for the Protection of Aquatic Life	9
Numerical Criteria for the Protection of Human Health	
Narrative Criteria	
Antidegradation	
Critical Conditions	
Mixing Zones	
Description of the Receiving Water	
Surface Water Quality Criteria	
Consideration of Surface Water Quality-based Limits for Numeric Criteria	11
Whole Effluent Toxicity	
Human Health	
Sediment Quality	
GROUND WATER QUALITY LIMITATIONS	
MONITORING REQUIREMENTS	
LAB ACCREDITATION	13
OTHER PERMIT CONDITIONS	13
REPORTING AND RECORDKEEPING	13
SPILL PLAN	
TREATMENT SYSTEM OPERATING PLAN	14
GENERAL CONDITIONS	14
PERMIT ISSUANCE PROCEDURES	14
PERMIT MODIFICATIONS	
RECOMMENDATION FOR PERMIT ISSUANCE	
REFERENCES FOR TEXT AND APPENDICES	
APPENDIX A—PUBLIC INVOLVEMENT INFORMATION	
APPENDIX B—GLOSSARY	
APPENDIX C—SITE MAPS	
APPENDIX D—RESPONSE TO COMMENTS	
AFFENDIA D—RESPUNSE TO COMINIENTS	∠1

INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW which defines the Department of Ecology's authority and obligations in administering the Wastewater Discharge Permit Program.

The regulations adopted by the State include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty (30) days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review (see Appendix A—Public Involvement of the fact sheet for more detail on the public notice procedures).

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in this review have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. Comments and the resultant changes to the permit will be summarized in <u>Appendix D—Response to Comments</u>.

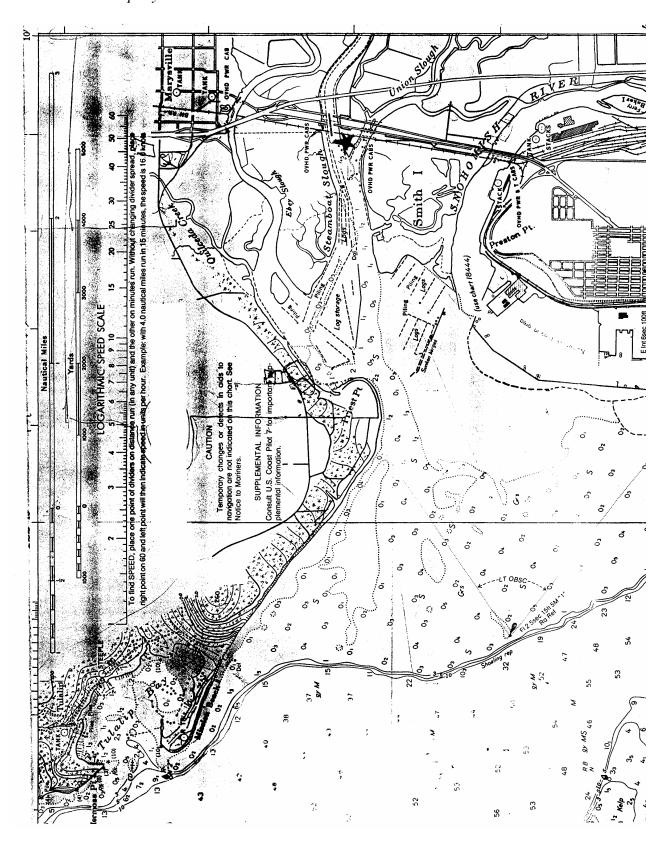


Figure 1. Vicinity Map

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

HISTORY

Hansen Boat Company is a ship repair facility located on the north side of Steamboat Island (see Figure 1). The property has been operated as a shipyard since 1972. The drydock became operational in September 1995.

Previously, the yard was primarily engaged in new boat construction but has changed to primarily boat repair due to market conditions.

INDUSTRIAL PROCESS

The facility consists of one steel drydock and one crane. The crane is employed almost exclusively for parts movement and is rarely used for moving ships. Approximately fifteen people are employed at this site.

Operation	Tonnage	Length	Width	Activity
Drydock	860 Tons	140 Feet	48 Feet	12 operations in 2004
				5 operations between January and May 2005
Crane	10	N/A	N/A	Not operated recently

Construction of new boat and ship components occur on a covered concrete slab called the fabrication slab. Fabrication slab usage is highly variable. Ships are also constructed and repaired in a building.

The basic function of the drydock is the repair and cleaning of ships, painting of ships' bottoms, propellers, rudders, and the external parts below the water line, or the construction of new ships. Electricity and fresh water are supplied to the ship in drydock from lines attached to, or embedded in, the drydock.

WASTEWATER MANAGEMENT

Shops providing services at Hansen are the fabrication shop, fiberglass assembly building, pipe shop, and sandblasting building. Waste water collected from these locations is first collected in the 4000-gallon aboveground tank, which is then hauled off by a licensed hauler such as Mar Vac for proper disposal, the facility used to dispose of this waste water by means of evaporation; however, the use of evaporator was discontinued two years ago. Drydock flood water is source-body water flowing into the drydock through the open ends of the U-shaped trough of the drydock deck and over the pontoon deck as the dock is sunk for drydocking of the vessel. The quality of the return flow relative to that of the source waterbody is dependent upon the amount and type of debris present on the side wall and on the deck surfaces prior to sinking.

The fabrication slab marine way is an area the facility uses to construct boats or major parts for boats. The outfall for this area has been blocked by a steel wall dam built with a rubber bottom. This area has only been used once within the last ten years. If there is waste water generated from the work conducted in this area, the facility proposes to collect the water and haul it off-site for disposal.

Bilge water, ballast water, and hydraulic fluids are hauled by an environmental transport company. Gray water discharges are not generated because live aboard status is not allowed.

SANDBLASTING PROCESS

The percentage of vessels entering the drydock which requires sandblasting each year varies from five to 33 percent. Sandblasting consists of propelling a metallic or nonmetallic grit by compressed air to forcibly impinge on the surface being cleaned. Metallic grit includes utility slag, copper slag, or aluminum. Nonmetallic grit includes recycled glass of various sizes, and sodium bicarbonate. Sandblasting, also called dryblasting, is used to prepare hulls for paints that require a new substrate for paint adherence such as polyethylene. The debris from the sandblast operations is picked up by scoop tractors, hand shovels, or other methods for transfer to hoppers or skip boxes. The sandblast shed consists of a rigid building without doors. Sandblast grit usage in 1995 was 215 tons, and in 1999 was 60 tons, with only five percent used on the drydock. Between 33 and 45 percent of vessels entering the drydock require hydroblasting. Forty-five percent of such vessels require no cleaning at all. A disposal firm picks up spent sandblast grit for reuse as cement calciner feedstock.

BEST MANAGEMENT PRACTICES

Paint is stored in a bermed waste storage shed. Engine repair services are not provided on-site. Best management practices are already employed at the site. Hansen developed and implemented a Spill Plan and Stormwater Pollution Prevention Plan.

PERMIT STATUS

The previous permit for this facility was issued on January 5, 2001. The previous permit placed effluent limitations on oil and grease for drydock flood water and stormwater discharges from the fabrication slab marine way. The limits were as follows:

Parameter	Effluent Limitation
Oil & grease	5 mg/L
Oil & grease	No visible sheen

An application for permit renewal was submitted to the Department on January 21, 2004, and accepted by the Department on April 2, 2004.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on June 6, 2005. During the history of the previous permit, the Permittee was in compliance with the effluent limitations set forth in the permit. The facility submitted a Stormwater Pollution Prevention Plan on January 1, 2004, and a Sediment Sampling and Analysis Plan on July 1, 2003, but has not yet submitted an AKART study as required by the permit. Due to the fact that the facility has elected to collect all waste water, including hydroblast wastewater or pressure washwater, and storm water from the shops and the fabrication slab marine way and haul them off-site for disposal, the facility is exempted from submitting an AKART study for their storm water. As required by the permit, the facility submitted a Stormwater Pollution Prevention Plan on January 1, 2004.

WASTEWATER CHARACTERIZATION

Based on the last five (5) years of data reported on the discharge monitoring report, there has been no discharge from the fabrication slab marine way. The waste water generated from the fabrication slab shop is collected and hauled off-site for disposal. The oil and grease concentrations measured from the effluent samples collected from the drydock area ranged from 1 to 4 mg/L.

PROPOSED PERMIT LIMITATIONS

Federal and state regulations require that effluent limitations set forth in an NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3 and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the surface water quality standards (Chapter 173-201A WAC), ground water standards (Chapter 173-200 WAC), sediment quality standards (Chapter 173-204 WAC), or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The limits in this permit are based in part on information received in the application. The effluent constituents in the application and in the discharge monitoring reports submitted during the last permit term were evaluated on a technology and water quality basis. The limits necessary to meet the rules and regulations of the State of Washington were determined and included in this permit. The Department does not develop effluent limits for all pollutants that may be reported on the application as present in the effluent. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation. Effluent limits are not always developed for pollutants that may be in the discharge but not reported as present in the application. In those circumstances, the permit does not authorize discharge of the non-reported pollutants. Effluent discharge conditions may change from the conditions reported in the permit application. If significant changes occur in any constituent, as described in 40 CFR 122.42(a), the Permittee is required to notify the Department of Ecology. The Permittee may be in violation of the permit until the permit is modified to reflect additional discharge of pollutants.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Pressure wash wastewater, whether treated or untreated, will not be allowed to enter the Slough. Collection, treatment, and recycle or discharge to the sanitary sewerage system of hydroblast wastewater is available technology and is used at most shipyards. Even most boatyards collect and recycle hull washwater. Hydroblast wastewater collection, treatment and recycle, evaporation or hauling to a sanitary sewerage system is determined to be consistent with the technology-based limitation cited in Chapter 173-220 WAC as all known, available, and reasonable methods of treatment (AKART). Discharge of process water directly to Steamboat Slough is prohibited.

Hansen Boat Company will be required to continue to follow, and improve as necessary, best management practices (BMPs). The drydock is required to be cleaned to remove spent blasting abrasives and other solid wastes including paint chips, scrap metal, wood, plastic, paper, and welding rods prior to flooding the drydock for launching (i.e., brooms, vacuums, etc.). The minimum amount of water flushing necessary to return the marine way and the floating drydock to a clean condition may be used as a final cleanup step. This waste water must be collected for proper disposal and not directly discharged to Steamboat Slough. Also, no visible sheen will be allowed. Photographs will be taken and maintained in a logbook to demonstrate the condition of the drydock floors prior to launching a vessel.

Waters of the state are especially vulnerable from painting and hull preparation directly over water. Over water work with tarping does not have the benefit of collection and discharge to the sanitary sewer or treatment to comply with surface water criteria as is proposed by Hansen Boat Company for upland or drydock repair. Attaching tarps to floats is more difficult than from piers and the instability, exposure, and size of floats increases the risk of spills. BMPs to minimize discharges to Steamboat Slough are required.

According to the last five years' data on the discharge monitoring report, Hansen has been in compliance with the oil and grease limit of 5 mg/L for their drydock discharge. This level of control along with the best management practices implemented on-site is AKART.

Hauling offsite wastewater from cooking, dishwashing, and showers is determined to be AKART.

Recycling of solvents on-site or off-site disposal is AKART. Zero discharge from maintenance shops is determined to be AKART.

Discharge of bilge and ballast water from drydocks by hauling off-site for treatment or discharge to the sanitary sewerage system subsequent to approval is determined to be AKART. There has been no metal data collected during the last permit term because Hansen has elected to evaporate or haul off-site all storm water collected or waste water generated on-site. The effluent limitations proposed for the drydock flood water are as follows:

Parameter	Maximum Daily
Oil & grease	5 mg/L
Oil & grease	No visible sheen

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established surface water quality standards. The Washington State surface water quality standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses of the surface waters of the state. Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin wide total maximum daily loading study (TMDL).

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

Numerical water quality criteria are numerical values set forth in the State of Washington's water quality standards for surface waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in a-receiving water while remaining protective of aquatic life. Numerical criteria set forth in the water quality standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the state of Washington.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy requires that discharges into a-receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a-receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a-receiving water are of higher quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

The Department has reviewed existing records and is unable to determine if ambient water quality is either higher or lower than the designated classification criteria given in Chapter 173-201A WAC; therefore, the Department will use the designated classification criteria for this water body in the proposed permit. The discharges authorized by this proposed permit should not cause a loss of beneficial uses. To verify the existing water quality, the Department is requiring Hansen to conduct the receiving water analysis in S9.B.

CRITICAL CONDITIONS

Surface water quality-based limits are derived for the waterbody's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic waterbody uses.

MIXING ZONES

The water quality standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving all known, available, and reasonable methods of prevention, control, and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

The National Toxics Rule (EPA, 1992) allows the chronic mixing zone to be used to meet human health criteria.

Since there is no storm water or waste water discharged from the Fabrication Marine Way Shop, pipe shops and sandblasting building to surface water, the facility does not qualify to apply for a mixing zone.

DESCRIPTION OF THE RECEIVING WATER

The facility discharges to Steamboat Slough, which is designated as a Class A receiving water in the vicinity of the outfall. Significant nearby nonpoint sources of pollutants include Highway 529 and I-5 stormwater bridge runoff. The City of Marysville sewer outfall is a significant point source discharge within a mile upstream of the Hansen Boat Company, and Steamboat Slough, and is a critical habitat for threatened species (i.e., Chinook salmon). A superfund site is located on the north side of Steamboat Slough.

Characteristic uses include the following:

water supply (domestic, industrial, agricultural); stock watering; fish migration; fish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall meet or exceed the requirements for all or substantially all uses.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA, 1992). Criteria for this discharge are summarized below:

Turbidity less than 5 NTU above background

Toxics No toxics in toxic amounts

The Total Maximum Daily Load for the Snohomish River does not include Steamboat Slough. Steamboat Slough is not 303d listed for any pollutant.

CONSIDERATION OF SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

Pollutants in an effluent may affect the aquatic environment near the point of discharge (near-field) or at a considerable distance from the point of discharge (far-field). Toxic pollutants, for example, are near-field pollutants—their adverse effects diminish rapidly with mixing in the receiving water. Conversely, a pollutant such as BOD is a far-field pollutant whose adverse effect occurs away from the discharge even after dilution has occurred. Thus, the method of calculating surface water quality-based effluent limits varies with the point at which the pollutant has its maximum effect.

The derivation of surface water quality-based limits also takes into account the variability of the pollutant concentrations in both the effluent and the receiving water.

Oil and Grease--The federal criteria for oil and grease in the *Quality Criteria for Water*, 1986, is that surface waters shall be virtually free from floating oils of petroleum. The Department determines no visible oil sheen, discoloration, or turbidity meets this requirement. Monitoring will be by visual observation, logging, and noncompliance notification.

<u>Turbidity</u>--Due to the potential fluctuations in turbidity of the receiving water and the effluent, turbidity monitoring is required to assess compliance with the water quality criteria for turbidity. The criteria for turbidity allow no more than a 5 NTU increase over background turbidity.

<u>Toxic Pollutants</u>--Federal regulations (40 CFR 122.44) require NPDES permits to contain effluent limits for toxic chemicals in an effluent whenever there is a reasonable potential for those chemicals to exceed the surface water quality criteria. This process occurs concurrently with the derivation of technology-based effluent limits. Facilities with technology-based effluent limits defined in regulation are not exempted from meeting the water quality standards for surface waters or from having surface water quality-based effluent limits.

The following toxic substances were determined to be present in the discharge: copper, lead, zinc, and possibly tributyltin. However, no waste water or storm water on-site, other than the drydocks area are discharged to surface water. Water quality-based effluent limits are set in the permit in case the facility chooses to discharge to surface water.

Water quality criteria for metals in Chapter 173-201A WAC are based on the dissolved fraction of the metal.

The Permittee may provide data clearly demonstrating the seasonal partitioning of the dissolved metal in the ambient water in relation to an effluent discharge. Metals criteria may be adjusted on a site-specific basis when data is available clearly demonstrating the seasonal partitioning in the ambient water in relation to an effluent discharge.

Metals criteria may also be adjusted using the water effects ratio approach established by USEPA, as generally guided by the procedures in <u>USEPA Water Quality Standards Handbook</u>, December 1983, as supplemented or replaced.

WHOLE EFFLUENT TOXICITY

The water quality standards for surface waters require that the effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected by commonly available detection methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response of the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, and therefore this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

In accordance with WAC 173-205-040, the Permittee's effluent has been determined to have the potential to contain toxic chemicals. The proposed permit would ordinarily contain requirements for whole effluent toxicity testing as authorized by RCW 90.48.520 and 40 CFR 122.44 and in accordance with procedures in Chapter 173-205 WAC. However, the Permittee is improving pollution control in order to meet other regulatory requirements. The results of an effluent characterization for toxicity would not be useful until after the improvements have been completed. Thus, no toxicity testing is required at this time.

HUMAN HEALTH

Washington's water quality standards now include 91 numeric health-based criteria that must be considered in NPDES permits. These criteria were promulgated for the state by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992).

The Department has determined that the applicant's discharge is unlikely to contain chemicals regulated for human health.

SEDIMENT QUALITY

The Department has promulgated aquatic sediment standards (Chapter 173-204 WAC) to protect aquatic biota and human health. These standards state that the Department may require Permittees to evaluate the potential for the discharge to cause a violation of applicable standards (WAC 173-204-400).

The Department has determined that the discharge of drydock flood water to Steamboat Slough, may have the potential to cause a violation of the sediment quality standards. A condition has been placed in the previous permit which requires the Permittee to demonstrate that either the point of discharge is not an area of deposition or, if the point of discharge is a depositional area, that there is not an accumulation of toxics in the sediments.

The facility submitted a Sediment Sampling and Analysis Plan on July 1, 2003. The plan has been reviewed by the Department's TCP/Sediment Management Unit and comments have been sent to the facility on November 17, 2003. The Department requested the facility revises the plan to address the comments and concerns and resubmit the revised plan to the Department for approval. As of today, the revised plan has not yet been resubmitted to the Department. This permit will require the facility to submit the revised plan to the Department by March 30, 2006. Following the Department approval of the Sediment Sampling and Analysis Plan, the facility has a period of 36 months to collect and analyze the sediment samples, and compile the results into a Sediment Data Report and submit to the Department.

GROUND WATER QUALITY LIMITATIONS

The Department has promulgated ground water quality standards (Chapter 173-200 WAC) to protect beneficial uses of ground water. Permits issued by the Department shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100).

This Permittee has no discharge to ground. Therefore no limitations are required based on potential effects to ground water.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved.

The monitoring schedule is detailed in the proposed permit under Condition S.2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

A visual observation and log with photographs shall be maintained of the receiving water during each launch from the fabrication slab.

LAB ACCREDITATION

With the exception of certain parameters, the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210).

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

TREATMENT SYSTEM OPERATING PLAN

In accordance with state and federal regulations, the Permittee is required to take all reasonable steps to properly operate and maintain the treatment system [40 CFR 122.41(e)] and WAC 173-220-150 (1)(g). An operation and maintenance manual will be submitted as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). It has been determined that the implementation of the procedures in the Treatment System Operating Plan is a reasonable measure to ensure compliance with the terms and limitations in the permit.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations and have been standardized for all individual industrial NPDES permits issued by the Department.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary, to meet water quality standards for surface waters or sediment quality standards, or water quality standards for ground waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the state of Washington. The Department proposes that this proposed permit be issued with an expiration date of June 30, 2010.

REFERENCES FOR TEXT AND APPENDICES

Hansen Boat Company

- 2004. Permit Application Form 2C Wastewater Discharge Information, January 21, 2004.
- 2004. Stormwater Pollution Prevention Plan, January 21, 2004.

Environmental Protection Agency (EPA)

- 1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.
- 1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.
- 1988. <u>Technical Guidance on Supplementary Stream Design Conditions for Steady State Modeling</u>. USEPA Office of Water, Washington, D.C.
- 1985. Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Ground Water. EPA/600/6-85/002a.
- 1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.
- Tsivoglou, E.C., and J.R. Wallace.
 - 1972. <u>Characterization of Stream Reaeration Capacity</u>. EPA-R3-72-012. (Cited in EPA 1985 op.cit.)
- Washington State Department of Ecology.
 - 1994. Permit Writer's Manual. Publication Number 92-109, last updated December 13, 2004.
- Wright, R.M., and A.J. McDonnell.
 - 1979. <u>In-stream Deoxygenation Rate Prediction</u>. Journal Environmental Engineering Division, ASCE. 105(EE2). (Cited in EPA 1985 op.cit.)

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to issue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Application (PNOA) was published on April 16 and 23, 2004, in *The Everett Herald* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department published a Public Notice of Draft (PNOD) on November 12, 2005, in *The Everett Herald* to inform the public that a draft permit and fact sheet were available for review. Interested persons were invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents were available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments were mailed to:

Water Quality Permit Coordinator Department of Ecology Northwest Regional Office 3190 – 160th Avenue SE Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30)-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of Public Notice of Draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 425-649-7293, or by writing to the address listed above.

APPENDIX B—GLOSSARY

- **Acute Toxicity**--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.
- **AKART**--An acronym for "all known, available, and reasonable methods of treatment."
- **Ambient Water Quality**--The existing environmental condition of the water in a-receiving water body.
- **Average Monthly Discharge Limitation**--The average of the measured values obtained over a calendar month's time.
- **Best Management Practices (BMPs)**--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural, and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.
- BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a-receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.
- **Bypass**--The intentional diversion of waste streams from any portion of a treatment facility.
- **Chronic Toxicity**--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's life span or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.
- **Clean Water Act (CWA)**--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.
- **Compliance Inspection Without Sampling-**-A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.
- Compliance Inspection With Sampling--A site visit to accomplish the purpose of a Compliance Inspection Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

- Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).
- **Continuous Monitoring**--Uninterrupted, unless otherwise noted in the permit.
- **Critical Condition**--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.
- **Dilution Factor**--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction, e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.
- **Engineering Report**--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.
- **Fecal Coliform Bacteria**--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.
- **Grab Sample**--A single sample or measurement taken at a specific time or over as short period of time as is feasible.
- **Industrial Wastewater**--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.
- **Major Facility--**A facility discharging to surface water with an EPA rating score of >80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.
- **Maximum Daily Discharge Limitation**--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.
- **Method Detection Level (MDL)--**The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.
- **Minor Facility--**A facility discharging to surface water with an EPA rating score of <80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

- **Mixing Zone**--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).
- National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.
- **pH**--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.
- Quantitation Level (QL)--A calculated value five times the MDL (method detection level).
- **Responsible Corporate Officer**--A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).
- **Technology-based Effluent Limit**--A permit limit that is based on the ability of a treatment method to reduce the pollutant.
- **Total Suspended Solids (TSS)**--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a-receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.
- **State Waters**--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington.
- **Stormwater**--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.
- **Upset**--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.
- Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a-receiving water.

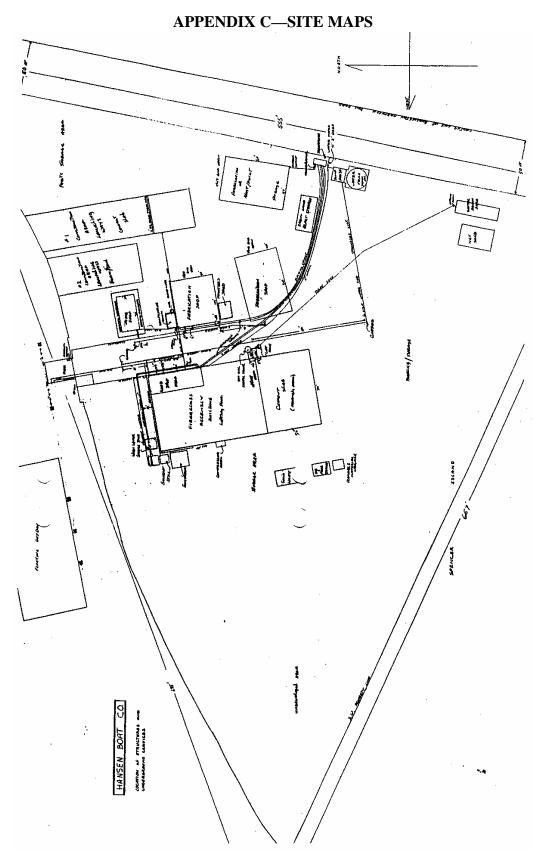


Figure 2. Site Map

APPENDIX D—RESPONSE TO COMMENTS



STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

November 3, 2005

Mr. Richard H. Hansen Hansen Boat Company 4124-34th Avenue N.E. Everett, WA 98205

Dear Mr. Hansen:

Re: Response to Comments on Draft Permit No. WA-003190-9

Thank you for your comments on the above-referenced draft permit dated July 26, 2005. A thorough review has been made of your comments, and the Department offers the following responses.

Comment 1: Special Condition S2 on page 6 of the permit: Is the drydock floodwater sampled quarterly or monthly? Hansen is currently conducting quarterly sampling.

Response: The Permittee is required to sample the drydock floodwater on a quarterly basis. The sampling frequency listed in footnote "a" of S2.A will be changed to read "quarterly."

Comment 2: Page 5 of the fact sheet: The Fabrication Slab has a dam constructed at the end of it. As noted on page 6, wastewater is transported off-site.

Response: The second sentence in the second paragraph of the Industrial Process section, which mentions that the wastewater from the fabrication slab discharges to Steamboat Slough will be removed.

Comment 3: Page 6 of the fact sheet: paragraph 3, the oil fired unit is no longer used.

All wastewater is collected and transported off-site.

Response: Paragraph 3 will be removed from the fact sheet.

Comment 4: Page 13, under the Monitoring Requirements section: Hansen constructed a dam at the end of the Fabrication Slab to eliminate the need for monitoring. This improvement was noted on page 6.

Response to Comments on Draft Permit Page 2

Response: Since there is no discharge from the Fabrication Slab, the second

paragraph in the Monitoring Requirements section which pertains to monitoring requirements for this area will be removed from the fact sheet.

Comment 5: Page 13, the fourth paragraph of the Monitoring Requirements section:

please note that MARCO has been out of business, and FVO is about to be

eliminated.

Response: This paragraph will be removed from the fact sheet.

Comment 6: Hansen does not discharge from the Fabrication Slab, but the existing

permit still requires a monthly monitoring report for this area to be

submitted. Furthermore, Hansen has been paying a permit fee in excess of

\$3,500 annually for the Fabrication Slab.

Response: If there is no discharge from the Fabrication Slab, the Department

proposes to remove the conditions associated with the activity in this area from the permit. This means that the Permittee is prohibited to discharge from the Fabrication Slab, unless the Department modifies the permit to include such discharge. Currently, Hansen is being billed for an annual permit fee under the category of one Marine Way (\$4,118), but not both marine way and drydock categories. When a facility has multiple permit fees, the Department has a policy to bill only for the activity with the highest annual permit fee. In this case, the annual permit fee for the marine way is higher than that of the drydock (under 250 feet in length). If the discharge option for the marine way is removed, the Permittee will be billed for the category of one drydock under 250 feet in length instead, which is \$2,746 annually. According to the telephone conversation between Richard Hansen and Jeanne Tran dated June 30, 2005, Mr. Hansen prefers to keep the discharge option open for the Fabrication Slab in case they receive future contracts to build new boats and need to use the area.

The draft permit and fact sheet will be finalized for public notice shortly. If you have any questions, I can be reached at (425) 649-7078 or you may submit further comments to the Department.

Sincerely,

Jeanne Tran, P.E.

Water Quality Program

Cc: Central files WQ1.3